

*THE WIDENING WORLD OF FUNCTIONAL  
ASSESSMENT: COMMENTS ON FOUR  
MANUALS AND BEYOND*

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An escalating number of materials have been published recently on the topic of functional assessment and assessment-based behavioral interventions. We review four manuals that purport to provide practical guidance for conducting functional assessment. An examination of these manuals yields encouraging evidence that the field of behavioral support has made notable progress in adopting a functional (behavior-analytic) approach to unwanted behaviors. The content of the manuals, considered in the context of emerging perspectives in behavioral support, suggests a number of important issues and directions that should be addressed by future functional assessment research and practice.

DESCRIPTORS: functional assessment, functional analysis

Interest in the process of functional assessment has intensified to an astonishing degree in the past few years. This rapid rise in popularity is evident in the scholarly and professional literature, and in a profusion of practical handbooks and guidelines available through the complete range of media options. Indeed, the process of functional assessment has come to be accepted as an appropriate and even obligatory precursor to the implementation of systematic behavioral interventions (Horner et al., 1990; Vittimberga, Scotti, & Weigle, 1999); as such, a tremendous demand for materials and tools has developed.

The most powerful manifestation, and now instigator, of this demand has been the language in the 1997 amendments of the federal Individuals with Disabilities Education

Act (IDEA), which calls for the use of functional behavioral assessments (FBA) and positive behavioral interventions, strategies, and supports (PBIS) under certain conditions of excessive problem behavior. Although neither the statute nor its regulations clearly define FBA or PBIS, essentially all published interpretations and explanations of the law define these terms in accordance with the operant framework that is very familiar to readers of the *Journal of Applied Behavior Analysis (JABA)* (see Sugai, Horner, et al., 2000; Tilly et al., 1998; Turnbull, Wilcox, Stowe, Raper, & Hedges, 2000). For instance, Sugai, Horner, et al. define functional behavioral assessment as “a systematic process of identifying problem behaviors and the events that (a) reliably predict occurrences and non-occurrence of those behaviors and (b) maintain the behaviors across time” (p. 137). There is a consensus that the term *functional behavioral assessment* is to be defined in the same way as our more familiar *functional assessment*, and that it clearly comes directly from the discipline of applied behavior analysis (Repp & Horner, 1999). As Bradley (1999) pointed out, the incorporation of these concepts in the language of a federal law probably represents the most significant policy impact that

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behavior analysis, or any similar discipline, has ever generated. In effect, the law mandates that special education systems attend to pertinent reinforcers and discriminative stimuli when conducting assessments and interventions for students whose placements are jeopardized due to problem behaviors. This is a dramatic directive that has obliged school systems across the country to incorporate behavioral perspectives and strategies to an extent never before realized. In turn, this has generated a burgeoning demand for materials, guidance, and training in functional assessment, PBIS, and behavior analysis.

Functional assessment is a process that was created within the conceptual and methodological confines of applied behavior analysis. The notion has been implicit since the discipline's earliest days (e.g., Bijou, Peterson, & Ault, 1968), and it gained conceptual (Carr, 1977) and methodological (Iwata, Dorsey, Slifer, Bauman, & Richman, 1982/1994) precision in the late 1970s and early 1980s. It was not until the 1980s, however, that functional assessment began to assume the broad, foundational role that it now claims (Mace & Roberts, 1993). It was then that functional assessment began to be employed for purposes beyond the essential delineation of maintaining reinforcers. Functional assessment began to be used regularly and systematically to assist in the identification of functionally equivalent response alternatives (e.g., Carr & Durand, 1985) and controlling antecedent stimuli (Dunlap, Kern-Dunlap, Clarke, & Robbins, 1991; Touchette, MacDonald, & Langer, 1985) and, ultimately, to create broader, more comprehensive, and more effective programs of behavioral support (Carr, 1997; Carr et al., in press; Horner et al., 1990).

Although the 1997 amendments to IDEA catapulted functional assessment into a much wider sphere of influence, its popularity was already increasing within the world of behavior analysis and behavioral support. This is

apparent through any examination of relevant book titles, chapters, and scholarly articles. To illustrate this phenomenon, we compiled all of the citations in the *JABA* annual indexes since the journal's inception in 1968 that were listed under *functional analysis*. (The term *functional assessment* has not been used in the *JABA* subject index, but many articles with titles or descriptors that include functional assessment are listed under functional analysis.) As Figure 1 shows, there were no entries at all until 1989, but thereafter a steady climb is evident to the point that 22 articles were indexed under functional analysis in 2000. It should be noted that the anomalous spike in 1994 (26 entries) was due to a special issue (Spring 1994) on functional analysis approaches to behavioral assessment and treatment.

Still, the attention devoted to functional assessment in the scholarly literature pales in comparison to the volume of information and material being disseminated through other public and professional avenues. For example, at the end of August 2000, the term *functional assessment* generated about 173,000 Web page matches on the popular search engine, Yahoo. This far exceeds the 45,400 matches for *positive reinforcement*, although it is still lags behind the 231,000 for *applied behavior analysis*, the 488,000 for *behavior analysis*, and the 489,000 for *behavior support*. The professional market is being supplied with large numbers of books, manuals, CD ROMS, and on-line training options (e.g., Desrochers, 1998; Janney & Snell, 2000; Liaupsin, Scott, & Nelson, 2000). In the aggregate, these materials will have a considerable impact on the way that functional assessment is understood and, eventually, on the way that it is conducted.

The purpose of this article is to appraise four manuals that are currently on the professional market and include functional assessment (or functional analysis) in the title. The four manuals are described in the fol-

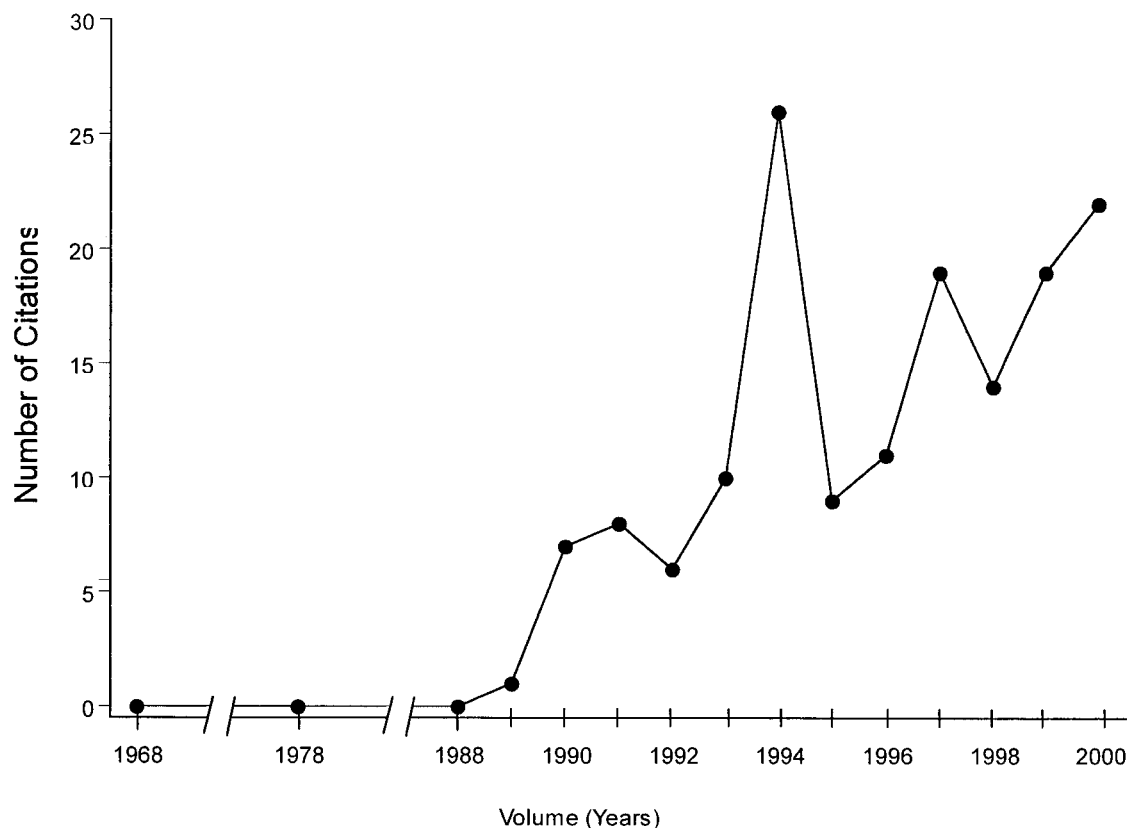


Figure 1. Number of citations in the subject index of the *Journal of Applied Behavior Analysis* for the term *functional analysis* for each volume from 1968 through 2000.

lowing paragraphs. However, these four manuals are only a small sampling of the large and growing number of similar products. Therefore, instead of focusing our comments on the particular features and relative attributes of the four manuals, we have opted to broaden our attention to include the more general status of functional assessment in our field, and to some directions we believe are either imminent or desirable. We begin with brief summaries of the four manuals and proceed to identify issues that characterize the state of our practice and the challenge for the future.

#### FOUR MANUALS ON FUNCTIONAL ASSESSMENT

*Functional Assessment and Program Development for Problem Behavior: A Practical*

*Handbook* (1997) is authored by Robert O'Neill, Robert Horner, Richard Albin, Keith Storey, Jeffrey Sprague, and J. Stephen Newton. This manual is a second edition and is, in fact, an extensive revision and updating of its seminal predecessor (O'Neill, Horner, Albin, Storey, & Sprague, 1990). Thus, this volume contrasts with virtually all other functional assessment products in its ability to claim a history. Together, the two editions have been used widely in practical applications, and they have been cited as contributing to the procedures of a large number of published research studies. O'Neill et al.'s initial work was ground breaking, and the current version still serves as the prototype manual on functional assessment.

The stated purpose of O'Neill et al. (1997) is "to present the logic, forms, and

examples that will allow the reader to (a) conduct a functional assessment in typical school, work, or community settings, and (b) develop a behavioral support plan that addresses problem behaviors" (p. 1). The authors accomplish these objectives via four chapters and useful appendixes that include blank forms and examples. The chapters include an introduction to the conceptual and procedural aspects of functional assessment (chap. 1), detailed strategies for conducting functional assessments through interviews, direct observations, and experimental manipulations (chap. 2), guidelines for developing behavior support plans on the basis of functional assessment data (chap. 3), and specific tips for writing behavior support plans (chap. 4). The content is described with precision, it adheres to a rigorous behavior-analytic framework, and it includes detailed, practical recommendations for data collection, data synthesis, and application.

*Conducting Functional Behavioral Assessments: A Practical Guide* (1998) by Ron Nelson, Maura Roberts, and Deborah Smith, is oriented more explicitly to the need for schools to carry out FBAs and behavior intervention plans (BIPs), in accordance with the stipulations of IDEA. As the authors state in their preface, "This manual was developed to help school personnel conduct FBAs and, in turn, develop effective BIPs" (p. 1). The conceptual orientation is very similar to that described by O'Neill et al. (1997), and the methods of assessment and intervention planning are also comparable. Nelson et al. recommend interviews and observations, and they provide forms to accomplish these purposes. Nelson et al. take a rather parsimonious route to their objectives, and the precision and comprehensiveness of the procedures are not nearly on the scale of O'Neill et al. Overall, this manual is a much more concise presentation of essentially the same assessment model as is described by O'Neill et al.

*A Functional Analysis of Behavior (FAB) Model for School Settings* (1999), by Ennio Cipani, was also developed in response to the 1997 amendments to IDEA. Cipani offers a "functional analysis of behavior" scheme and uses his seven-category diagnostic system to introduce educators to applied behavior analysis. Cipani's diagnostic system is a simple nosology of possible functions of problem behaviors; four are listed as positive reinforcement functions (access to adult attention; access to peer attention; access to tangible object, event, or activity; access to immediate sensory reinforcer), and three are indicated as negative reinforcement functions (escape or avoidance of instruction, task duration; escape or avoidance of instruction, task difficulty; escape or avoidance of unpleasant social situations). The bulk of Cipani's manual is devoted to a description of these categories. Some brief descriptions of assessment procedures (interviewing, recording, hypothesis testing) are also provided, as are references and tips for report writing. In contrast to O'Neill et al. (1997) and Nelson et al. (1997), Cipani does not offer forms or direct guidance for program development. Cipani's focus is more on describing the behavior-analytic model and, especially, the diagnostic scheme he devised for the functional analysis process.

*One Minute Academic Functional Assessment and Interventions: "Can't" Do It . . . or "Won't" Do It?* (1999), by Joe Witt and Ray Beck, is concerned with problems and procedures that differ from the previously described manuals. Witt and Beck's manual addresses academic behavior (rather than problem behavior), and the functional assessment they refer to involves a process of analyzing antecedent and consequent events to discover "what can help a child learn at an optimal level" (p. 1). The foundation of Witt and Beck's process is Lindsley's precision teaching model (Lindsley, 1992), and the authors are true to Lindsley's recommendations, up to

and including the use of the standard celeration chart (Pennypacker, Koenig, & Lindsley, 1972). The contents include an introduction followed by three chapters that describe the model and the assessment: an overview of academic functional assessment; a primer of precision teaching; and a description of the "one-minute" functional assessment process. The majority of the book (about 125 pages) is devoted to three chapters that offer specific intervention and teaching strategies for when the student won't do the work (chap. 4), the student needs more practice (chap. 5), and the student needs more help (chap. 6). Most of these strategies are taken directly from the applied behavior-analytic research literature that has accumulated over the past 3 decades.

#### ISSUES IN THE CURRENT AND FUTURE STATUS OF FUNCTIONAL ASSESSMENT

The four manuals represent an array of emerging products that are published or accessible through the Internet or other sources. These manuals reflect a growing variety of definitions of functional assessment, methodologies, approaches to intervention, and understanding of context issues in functional assessment. These issues present critical discussion points for the practice of behavior analysis and challenges for the continuing development of an applied science that is meaningful, practical, and effective.

#### *Definitions and Terminology*

As the term *functional assessment* becomes part of the broad professional vernacular, behavior analysts are faced with a great opportunity to infuse current, functional perspectives into the accepted routines of behavior management and educational support. To take advantage of this opportunity, it is important for behavior analysts to issue our central messages with a common voice, and

to explain our key terms with equivalent definitions. We have done this very well with our foundational concepts, such as positive reinforcement and discrimination, but we have yet to exhibit satisfactory agreement with functional assessment, and this lapse may result in a failure to produce the greatest possible impact on the field. This failure to agree is manifest in the titles and definitions of the four manuals in this review.

Functional assessment is generally understood to be a *process* that results in useful information about functional relations. In this, the four manuals are in agreement. All four emphasize that the content of their procedural recommendations needs to be understood as a process, rather than as a test or a static measurement operation. Unfortunately, the manuals do not correspond on other important aspects of the definition. Cipani (1999), for instance, does not even use the term *functional assessment*, but instead favors *functional analysis* and *functional analysis of behavior* to refer to the same process that O'Neill et al. (1997) and Nelson et al. (1998) describe as *functional assessment* and, in deference to the language of IDEA, *functional behavioral assessment*. These authors follow a tradition that emerged in the 1980s that distinguishes functional assessment (the larger process that includes indirect and direct methods) from functional analysis (the component of the assessment process that involves experimental methods for determining functional relations) (e.g., Halle & Spradlin, 1993; Horner, 1994; Lennox & Miltenberger, 1989). It is a weakness in the behavior-analytic movement that this tradition (or an alternative) is not universally accepted as the convention by which the concepts and practices of functional assessment are to be communicated. Cipani's title is one manifestation of this problem. The *JABA* subject index, which subsumes functional assessment under the rubric of functional analysis, may be another.



The distinction between functional assessment and functional analysis may be a small confusion when compared to the more far-reaching issue involving the *purpose* of a functional assessment, or what a functional assessment is actually intended to assess. Most consumers of functional assessment manuals, including those motivated to comply with the stipulations of IDEA (Tilly et al., 1998; Turnbull et al., 2000), assume that functional assessment is concerned with problem behaviors—that it is focused on identifying functional relations between problem behavior and environmental variables and, in particular, on the operant function of the problem behavior. This is certainly the case in the three manuals authored by O'Neill et al., Nelson et al., and Cipani. Witt and Beck's manual (1999) is conspicuously different. Here, as the title indicates, the authors are concerned with academic behavior. Witt and Beck define functional assessment as "a process for discovering what can help a child learn at an optimal level" (p. 1). They state that "functional . . . means that the focus is on factors in the student's environment which are under teacher control and which make a difference in student performance" (p. 6). The emphasis is on the delineation of functional relations; in this sense, the use of the term in conjunction with academic assessments is not unprecedented (e.g., Daly, Witt, Martens, & Dool, 1997). However, it may be a source of confusion for the large numbers of consumers who are not behavior analysts and who are looking for state-of-the-art guidelines for resolving behavior problems.<sup>1</sup>

The term *functional assessment* has been

used in a variety of ways in past decades (e.g., Bullis, Tehan, & Clark, 2000; Halpern & Fuhrer, 1984), but it is becoming increasingly urgent that behavior analysts come to a consensus regarding its most appropriate use. The four manuals treated in this review, all of which were produced by well-respected behaviorally oriented authors and researchers, reveal obvious differences within the field, and these are undoubtedly a cause of bewilderment for professionals from outside the behavioral community. Each of the manuals has respectable internal integrity, but together they signal a need for a more coherent behavior-analytic message.

#### *Methods of Conducting Functional Assessments*

Although the manuals<sup>2</sup> under review differ in the depth and breadth of material presented to a targeted audience, they are consistent in their presentation and description of methodologies for conducting functional assessments. Although the manuals do not address *all* available methods for conducting functional assessments, they address indirect, direct, and experimental approaches as the foundation of functional assessment strategies. Indirect methods include structured or unstructured interviews, rating scales, checklists, and record reviews. Direct methods require direct observation of behavior, and include strategies such as scatter plots and antecedent-behavior-consequence (ABC) forms. Finally, the functional assessment process may include experimental manipulations (i.e., true functional analyses) that control conditions in the immediate environment to identify the relative influence of

<sup>1</sup> We acknowledge the legitimacy of Witt and Beck's use of *functional assessment* to refer to the analysis of academic responding, but we question their implication in the title that the assessment can be conducted in 1 min. It is our opinion that no valid functional assessment can be conducted in 1 min, and we found no indication in the manual itself that the authors' strategies could be performed in this brief period.

<sup>2</sup> From this point, our review focuses on the functional assessment of problem behaviors; thus, we do not include Witt and Beck's manual when we refer to the body of reviewed material. When we do intend to include Witt and Beck's manual in the discussion, we cite it explicitly.

variables on the occurrence of target behaviors.

Cipani (1999) presents functional assessment approaches that include interviews, ABC methods, analogues, and scatter plots. Although sample forms are not included, examples of data sets and explanations of methods are presented clearly. In addition, Cipani presents a variation on the functional analysis procedure, an in-class hypothesis-testing procedure. In-class hypothesis testing consists of alternating baseline and treatment conditions across a class setting for several days or weeks for one of the seven diagnostic categories. Although this process can be invaluable for validating intervention strategies and confirming hypotheses, the lengthy extension of such an approach across several weeks may not meet the need for practical expediency that exists in most typical school and community settings.

Nelson et al. (1998) also advocate an array of functional assessment methodologies that include interviews, ABC observations, and temporal analyses. However, the authors provide some interesting "wrinkles" to these methodologies. For example, their short interview form can also be used as a self-report form for individuals who may be able to respond directly to questions about their own behavior, thus expanding its applicability to individuals with problem behavior and higher cognitive and communication skills. In addition, the Temporal Analysis and Ranking Form combines a scatter plot with a ranking of the problem behavior from 1 (low) to 10 (high) for the time period observed. This form has the benefit of simplicity, and it appears as if it could be used widely by school personnel. However, the value of the form may be compromised by a lack of operational specificity, such that useful interpretation of the rankings could be jeopardized due to inconsistencies in data collection. It may be that this kind of form is adequate for many circumstances that are

relatively straightforward, but it may be insufficient for the more complex and chronic cases that require greater precision. These, of course, are among the many empirical questions that must be researched.

O'Neill et al. (1997) provide a much more detailed description of their indirect, direct and functional analysis methods. Their Functional Assessment Interview Form is more detailed and comprehensive than most other interviews, and it has become a standard instrument for the field. Like Nelson et al. (1997) and others (Kern, Dunlap, Clarke, & Childs, 1994), O'Neill et al. expanded the scope of functional assessment interviews to incorporate information gathered directly from the individual with problem behavior in their Student-Directed Functional Assessment Interview. In addition to gathering interview information, this instrument prompts the respondent to rate from 1 to 6 the level of the behavior problems he or she exhibits throughout daily scheduled activities. O'Neill et al. also provide information, examples, and samples of their Functional Assessment Observation Form (FAOF) that combines an ABC form with a modified scatter plot to collect direct observation data of multiple antecedents, behaviors, consequences, and perceived functions. The FAOF can be invaluable in gathering a significant amount of data for the skilled practitioner. However, the FAOF may be too complex for individuals with limited experience in the field. Finally, O'Neill et al. provide a helpful discussion of functional analysis manipulations, including specific information about how to conduct such manipulations with important considerations and guidelines for use of the procedures.

All of the manuals present functional assessment methods that are consistent with current practice in the field of behavior analysis. It is not yet clear, however, whether they reflect the tools that meet the needs of

practitioners and are actually used. Desrochers, Hile, and Williams-Moseley (1997) surveyed the use of functional assessment procedures by clinicians with experience in supporting individuals with mental retardation and severe problem behaviors. The data indicated substantial support for the importance of functional assessment approaches and showed that the clinicians expressed clear preferences for the available methods. Over 95% of respondents used interviews, and approximately 78% used direct observation ABC analyses. Experimental manipulations were listed as the 10th most used approach, with fewer than 20% of the respondents indicating that they used the approach frequently. These results are encouraging, in that a high proportion of respondents used both indirect and direct methods to conduct functional assessments, and the ordering of preferences is not surprising because it corresponds with the amount of time and effort that each method demands. It is likely that this latter observation will become increasingly important as functional assessment is used by larger numbers of educators and behavior support specialists around the country. That is, the time, effort, and expertise required to conduct functional assessments will be a significant factor in the manner with which the process is used to develop interventions. Therefore, research that focuses on the integrity, validity, and efficiency of functional assessment methods in typical contexts will be of supreme importance as more and more school and community personnel come into contact with functional assessment.

#### *Moving from Functional Assessment to Intervention*

The indispensable purpose of a functional assessment is to provide the basis for an effective plan of behavior support. Information (data) from the functional assessment process should lead logically to the construc-

tion of an effective and efficient intervention. If there is no anticipated benefit for the individual whose problem behaviors are being assessed, there is no rationale for conducting a functional assessment. Yet there is grave danger that this assumption may be violated. The increased presence of laws and regulations advances the reality that many functional assessments are being performed to meet bureaucratic mandates, with little regard for the purpose and potential value of the exercise. In too many instances, forms are being completed and placed in file cabinets, and teachers and other support providers are unaware of their existence or their significance. For this reason, it is vital that the process of functional assessment always be linked to intervention, and that behavior analysts emphasize this essential connection.

Our experience indicates that school personnel, in particular, are receiving a tremendous amount of training and technical assistance in the area of functional assessment. However, even when the training is reasonably comprehensive and consistent with behavior-analytic perspectives, we still find large gaps between an individual's understanding about the functional assessment process and the development of behavior support plans. In fact, it is not unusual to see that trainers and technical assistance providers have very different approaches to what happens after a functional assessment has been conducted. This is a complicated but exceedingly important issue.

Differences that exist in the field are reflected in the manuals under review. Only two of the manuals directly address what happens after the functional assessment is completed. The O'Neill et al. (1997) and Nelson et al. (1998) manuals both present what could be described as a hypothesis-development stage in their functional assessment process. This is referred to as a "summary statement" by O'Neill et al. and as a "summary analysis" by Nelson et al. Both of



these approaches describe the need to organize information derived from the functional assessment into a clear and concise statement about the antecedents, consequences, and functions of the individual's behavior. Nelson et al. briefly describe how a summary analysis should be matched to the function of challenging behavior and present several types of interventions that might be considered by the identified function of the behavior. O'Neill et al. provide a much more comprehensive approach for formulating hypotheses or summary statements. These authors spend considerable time describing a process for moving from a functional assessment to the development of a behavior support plan. The authors devote entire sections to the preparation of behavior support plans, and they include examples of completed plans in the text. This detailed description presents critical issues to consider, including a competing behavior model for identifying appropriate alternative and desirable behaviors. In our opinion, the attention that O'Neill et al. devote to the intervention phase of the process represents a model that future authors should emulate. The conceptual details and recommended strategies will differ as research and experience accumulate, but the explicit and emphatic linkage between the assessment and intervention phases should never be assumed or understated.

#### *Putting Functional Assessment in Context*

The manuals reviewed in this article do an admirable job of conveying the technology of functional assessment as it has developed to date. For the most part, the content and the procedures have an empirical foundation in the literature of applied behavior analysis, and it can be confidently anticipated that the manuals will be useful in the hands of appropriate consumers. The spread of functional assessment, however, guarantees that additional challenges will be posed. These relate to the expanding range of con-

texts and problem behaviors (Heckaman, Conroy, Fox, & Chiat, 2000; Iwata, 1994; Sprague & Horner, 1999) and the ongoing quest to produce assessment-based interventions that result in enduring lifestyle benefits (Carr et al., in press). In this section, we touch on a few of these issues that seem particularly germane at this moment in the field's evolution.

*Functional assessment practitioners.* Although it is important for behavior analysts to be experienced in the continuum of functional assessment procedures, it is important to appreciate that the use of indirect, direct, and experimental approaches for any given child requires a significant investment of professional time and resources. Given the number of students who may require functional assessments in a typical educational setting, it is unreasonable to believe that there will be significant numbers of well-trained behavior analysts to conduct functional assessments for all children regardless of the depth of the required assessment. For this reason, behavior analysts should look to develop a team approach for conducting functional assessments, developing hypotheses, and developing intervention plans (Sugai, Lewis-Palmer, & Hagan-Burke, 2000). A team-based functional assessment process gives behavior support specialists an opportunity to concentrate their skills in areas essential to the team's functioning, and it supports additional team members in developing capacities that may generalize to other students. The manuals reviewed herein are geared to fairly broad audiences, particularly in school settings, and that seems appropriate to building capacity of teams to produce valid and valuable assessment-based interventions. At the same time, it does not contradict the occasional need for highly specialized examinations using analogue contexts and functional analysis methodologies (Iwata et al., 1982/1994), but these atypical

circumstances are beyond the scope of the school-based approaches.

*Matching the level of functional assessment to the level of the behavioral challenge.* Given the limited resources that are available in most home, school, and community settings, it is important that practitioners develop an understanding that different levels of functional assessment are needed to address different characteristics of challenging behaviors. As several authors have noted, there is a conceptual relation between the degree of the behavior problem and the comprehensiveness of the functional assessment required (Tilly et al., 1998). As the intensity, severity, or durability of problem behavior increases, so does the comprehensiveness of behavior assessment. An effective practitioner in the area of applied behavior analysis should be able to clearly identify the level of challenge represented by a target behavior so as to anticipate the time and resources needed to conduct an adequate functional assessment. As new tools and approaches for gathering functional assessment information are developed, practitioners should become more adept at precisely matching the depth of assessment to the severity of the problem behavior. At the present time, we have little data to help guide these kinds of decisions, and the available manuals provide little attention to this question. Increasingly, however, this will emerge as an important question, and it is one that applied researchers would be wise to consider.

*Beyond functional assessment.* To their credit, O'Neill et al. (1997) operationalized five primary outcomes of the functional assessment process. Their list is similar to those of others (e.g., Foster-Johnson & Dunlap, 1993; Lennox & Miltenberger, 1989) in that it requires a specification of antecedent and consequence events and a synthesis of this information into summary statements (hypotheses) regarding the variables that govern the occurrence of the target

behavior. O'Neill et al. also indicated that a behavior support plan must be based on a good functional assessment, must be consistent with the fundamental principles of behavior, and must fit into the context of the individual's life. This important statement, with which we agree, takes the behavior support plan beyond the current conventions of the functional assessment process, because it requires information that is not within the existing parameters of functional assessment. In particular, as presently defined, the process of functional assessment is not concerned with the context of the individual's life.

There are a number of reasonable arguments that testify to the importance of acquiring information relating to the bigger picture of how an individual fits in the context of his or her home, school, and community life, and the social fabric and routines that tie together the various elements of his or her lifestyle (Albin, Lucyshyn, Horner, & Flannery, 1996; Dunlap, Fox, Vaughn, Bucy, & Clarke, 1997; Kincaid, 1996). These arguments involve the actual utilization of the assessment-based support plan and the potential of the plan to produce durable outcomes that have meaningful social validity (Carr et al., in press). Although our currently defined functional assessment outcomes are critical to the construction of effective interventions, the supplemental information about the context of a person's life may also be essential, at least in cases in which behavior problems are chronic and pervasive.

The field has yet to develop practical assessment strategies that can produce this supplemental information in an efficient and useful format. However, the technology of person-centered planning (Kincaid, 1996; Mount & Zwernick, 1988) has begun to demonstrate great promise as a stand-alone team-building and planning endeavor and as

an invaluable adjunct to functional assessment (Kincaid & Fox, in press).

Person-centered planning may provide improved information about a person's life, dreams, relationships, and support systems and can lead to the identification of a number of effective interventions and approaches that may include lifestyle, setting event, or antecedent interventions that may not be identified by more traditional functional assessment approaches. One of the intentions of person-centered planning is to create an effective team context for the development of a comprehensive behavior support plan. If there is not a good fit between the plan and the context, the behavior support plan is not likely to be implemented. Person-centered planning has the capacity to motivate the team, gather information from the team, and incorporate that information into an effective support plan. When a team sees their input, ideas, and issues addressed within a behavior support plan, it may increase the likelihood that the effective interventions contained within the plan will be implemented. In short, person-centered planning, as an addition to functional assessment, may provide the context that is necessary for a plan to succeed and yield optimal benefits.

### CONCLUSION

These are exciting times for applied behavior analysts, especially for those in the field who are concerned with problem behaviors in schools and other settings. New laws and policies regarding functional assessment and positive behavior interventions and supports have opened opportunities that have never existed before. As a result, there has been a deluge of new materials filling the new markets that have been created by the new laws and policies. We have examined and critiqued four manuals that are representative of the functional assessment materials. Although they differ in some impor-

tant features, we are encouraged that the manuals are true to their behavior-analytic foundations, and they provide practical guidance for their expanding audience. Yet, as can be expected from a rapidly developing discipline, there are limitations and differences that need to be resolved if the field is to realize the possibilities of this special opportunity. We are optimistic that the technology of functional assessment will continue to be refined and, more important, expanded to meet the needs presented by problem behaviors throughout our schools and communities.

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